

W5YI REPORT

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Dits & Bits

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★ In This Issue ★

Complete Wrapup on Privacy Act
What is the EPCA?
What Can You Listen To!
What You Can't Listen To!
Penalties for Illegal Monitoring
Cellular Phone Labelling
Ham Call Signs of Your Choice
Christmas PC Marking Outlook
Update on Video Home Shopping
SIRA Hams in San Salvador
Selling the Radio Spectrum
Illegal CB Radios Destroyed
PC Networking Plan and...
much, much more!



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Communications Privacy Act Signed Into Law!

On October 21, President Reagan signed landmark communications privacy legislation (passed by Congress less than a month ago) into law. Public Law 99-508 takes effect on January 19, 1987. On the surface, The Electronic Communications Privacy Act appears primarily directed against the scanner industry ...and users who listen to cellular phone calls - although it covers far more than that.

Just released, Senate Report 99-541 contains the drafting committee's explanation of the ECPA. It is anticipated that the Senate's interpretation will prevail over the House Report since it was the Senate's version of the legislation that was signed into law. Even that interpretation is cloudy. The language used in it is sometimes indirect ...often deliberately ambiguous. In some cases, what is not said is as important as what is said.

JUST WHAT IS THE EPCA?

The EPCA amends US Code Title 18, Chapter 119, the federal law governing interception of "wire" and "oral" communications. It sets new rules for electronic surveillance by law enforcement agencies and for investigative access to electronic mail and computer files. The legislation was initially opposed by the Justice Department since they saw it as inhibiting. Also increased are criminal penalties for malicious interference to satellites.

"Electronic communication" is now defined as "any transfer of signs, signals, writing, images, sounds, data or intelligence of any nature transmitted in whole or in part by a wire, radio, electromagnetic, photoelectronic or photooptical system that affects interstate or foreign commerce. Certain communications are exempted from privacy protection.

Public Law 99-541 supposedly closes loopholes in the 1968 Wiretap Act which aimed to protect the unauthorized interception of telephone calls. These loopholes were created by the introduction of new technologies such as cellular telephone, electronic mail and various video/data communications.

The legislation was spearheaded in the Senate by Sens. Patrick Leahy (D-Vt.) and Charles Mathias (R-Md.) and in the House by Reps. Robert Kastenmeier (D-Wis.) and Carlos Moorhead (R-Calif.) - none of whom apparently know much about electromagnetic phenomenon.

They obviously listened to the lobbyists who told them that private radio communications should and could be granted the same level of privacy protection as wireline calls and the U.S. Postal Service. While their objective was admirable, the resulting legislation is flawed! ...Something that everyone seems to know except the Congress and the

cellular telephone using public who are being led to think their calls are private.

WHAT CAN YOU LISTEN TO?

The radio portion of cordless telephone conversations are specifically exempted from Public Law 99-508 since they are "easily intercepted".

You can also legally monitor:

- Any marine or aeronautical communication.
- Any Amateur, CB or General Mobile Radio Service transmission.
- Any communication transmitted "for the general use of the public, or that relates to ships, aircraft, vehicles or persons in distress."
- Signals causing harmful interference to "any lawfully operating station or consumer electronic equipment, to the extent necessary to identify the source of the interference."
- Satellite transmissions of "network feeds", some audio subcarriers and cable programming covered by Section 705(b) of the Communications Act.
- Any governmental, law enforcement, civil defense, private land mobile or public safety (including police and fire) radio communication system which is "readily accessible to the public."
- Any other electronic communication made through a system "configured so that such electronic communication is readily accessible to the general public."

WHAT YOU CAN'T LISTEN TO!

In most cases, radio communications defined not "readily accessible" will be illegal to monitor unless one of these exemptions applies.

"Readily accessible to the general public" means that the communication is not:

- scrambled or encrypted...
- transmitted using modulation techniques whose essential parameters have been withheld from the public with the intention of preserving privacy (such as "spread spectrum")
- carried on a subcarrier of other signal subsidiary to a radio transmission...
- transmitted over a communication system

provided by a common carrier... (except for tone only paging signals - including cellular telephone systems)

- transmitted on frequencies allocated under FCC rules §Part 25 [communication-relay satellites]; §Part 74(d) [remote broadcast pick-up]; §Part 74(e) [aural broadcast auxiliaries, including studio-to-transmitter links]; §Part 74(f) [television broadcast auxiliaries and studio-to-transmitter links] or §Part 94 [private fixed microwave.]

To add more confusion to the issue, some illegal spectrum monitoring (such as to cellular phone calls) is considered a criminal offense - others (such as Remote Broadcast Pick Ups) is a civil offense. That means it is not a crime to monitor RPU's but you can be exposed to civil liability (of up to \$500) if you are the subject of a lawsuit. RPU listening is a favorite among scanner users because of its newsgathering role.

PENALTIES FOR ILLEGAL MONITORING!

Intentional listening of most unencrypted but EPCA protected radio communications carries a criminal penalty of up to one year in jail and/or a fine of up to \$100,000 for a first offense!

Monitoring of the "Public Land Mobile Radio Service" (PLMRS) for example: a cellular or "old technology" radiotelephone call or any type of paging (except for tone-only) - carries a first offense penalty of \$500 if the signal is not scrambled or encrypted.

If the communication is scrambled or encrypted, or the interception is for a "bad purpose" ...or is a subsequent offense, the penalty is up to 5 years in jail and/or a fine of up to \$100,000!

SURREPTITIOUS INTERCEPTION DEVICES"

Though the ECPA makes it illegal to manufacture, assemble, possess, sell, advertise or mail any device "primarily useful for the surreptitious interception of electronic communications" (and this includes kits), neither the Senate or the House Report says anything about what devices fall into this category. This makes it unlikely that restrictions on the

I am a currently licensed Extra Class amateur radio operator and wish to be a volunteer examiner. I have never had my station or created license revoked or suspended. I do not have any other licenses.

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER? If so, please send a copy of "The W5YI Report" Program? If so, please send a copy of "The W5YI Report" Program? If so, please send a copy of "The W5YI Report" Program?

capabilities of radio receivers will be imposed anytime soon.

Courts will have to decide what devices are illegal on a case-by-case basis. This is both good and bad. While certain receivers are not being legally defined as illegal, a court, by applying Public Law 99-541, could conceivably decide that a regular wide-band scanner was illegally used and inadvertently hand down a precedent setting decision making all scanners illegal!

It does appear, however, that 800-900 MHz (only) scanners and converters (such as the one advertised on page 69 of the November "CQ" magazine) do fall under the definition of a "surreptitious interception device." The "Super Converter 8001" (Cost: \$59.94) allows a regular UHF scanner to receive 810 to 912 MHz. It is obvious that this converter is one of the many intended for the real-life soap opera snoop business. Cellular radio operates between 824 and 894 MHz.

And did you happen to see the piece on "cellular phone eavesdropping" that the Wall Street Journal of October 29th did? It was right on target! It is simply hogwash that cellular phone calls are any harder to monitor than the cordless variety! The fact is that they are easier since cellular range is 5 to 10 miles and cells are available in every metropolitan area. Cordless telephone range is less than 500 feet and their locations are unknown. One should assume no better cellular privacy than afforded ham radio ...and maybe less.

CELLULAR PHONE PRIVACY LABELING

The FCC requires that cordless telephones be labeled notifying the public that their calls may not be private. The Washington (DC) Legal Foundation (WLF), an 80,000 member public-interest law center, filed a 14-page petition on September 5th calling for a "marketplace solution" to the cellular privacy issue. They ask the FCC to require manufacturers to place a warning on cellular phones notifying users that privacy can not be guaranteed. The label would read "Privacy of communications may not be ensured when using this phone."

WLF said that this approach "strikes an equitable and effective compromise between the need of some cellular telephone users for privacy and the long standing Commission policy that the public should be free to monitor the open airwaves without restriction." We particularly like one of WLF's contentions, "The burden of protecting privacy of communications properly lies with the cellular user."

The FCC has acknowledged receipt of the petition and, having found it meritorious, has assigned it RM-5577 for public comment. The comment period has already closed. Reply comments were due by November 4.

COMMENTS FOR CELLULAR LABELING....

The comments were interesting and (in some cases) not anticipated. Giant AT&T said:

Labeling is in the public interest. "The label would place users on notice that their calls are vulnerable to interception, whereupon they can take such measures as they individually require to assure privacy of their communications."

Labeling would benefit cellular. "Cellular telephone customers buy cellular telephone sets with the expectation of privacy. In due course, they learn that they lack the privacy they expected, and may feel that their suppliers have misled them. If suppliers place their customers on notice at the time of sale, they will experience fewer customer complaints."

Labeling is cost-effective. "The cost of such a label, and additional text in the owner's manual, should be negligible."

Labeling will lead to more secure equipment. "A Commission commitment to customer information on this subject will expand this market, encourage the development of new and diverse security devices, bringing down the cost of such devices to customers."

In their comments, M/A-Com said that: Labeling is necessary "...[cellular] subscribers have no idea that their conversations are readily accessible for casual monitoring. Consequently, a label is needed and would serve the public interest by warning subscribers

many computer bulletin boards and in radio newsletters. We do not get any ad (see margin between pages 4 & 7) on license preparation materials. Thanks!

WOULD YOU DO US A FAVOR?

that they should not discuss sensitive or personal matters on cellular telephones."

Even Congress may favor cellular labeling. The Senate Report makes note that the FCC "might consider the feasibility of requiring that cellular telephones be labeled to indicate that cellular calls are radio-based communications, and as such, portions of the communication may be intercepted by available scanning equipment..."

The report also mentions that the FCC might consider "requiring that scanning equipment be labeled to indicate that the intentional interception of protected communications could be a federal violation."

COMMENTS AGAINST CELLULAR LABELS

The providers of cellular telephone service lined up opposing labeling:

Labeling is "contrary to the public interest. "...inappropriate and unfounded warnings would have a corresponding negative impact on the marketplace by misinforming the consumer about the true value of the cellular telephone as a highly private form of communication." (BellSouth Mobility, Inc.)

Labeling is unnecessary. "Where, as here, there is no evidence of a problem, the Commission should refrain from interfering in the market to impose a 'solution.'" (Bell Atlantic Mobile Systems)

"The new Privacy Act will be an effective deterrent against intentional invasions of the privacy of cellular subscribers." (Southwestern Bell Mobile, Inc.)

A Label would be confusing. "[It] could have the effect of confusing cellular users or creating the false impression that the cellular user does not have a private line on dedicated frequencies." (Southwestern Bell Mobile)

Labeling is onerous. "The Commission has not and should not consider any labelling regulation which would place the burden on citizens to protect their privacy protections." [sic] (Cellular Telecommunications Industry Association)

THE CELLULAR RADIO-PHONE SERVICE

The Federal Register of October 22nd (page 37398) details the recent expansion of the Cellular Radio Service from 40 to 50 MHz. Effective November 21, 1986, the service will look like this:

Mobile-to-Base (Actually to landline hook up)
(208 channels - 30 KHz spacing)

Radio	(Common Carriers)	Wireline
824.0-835.0 MHz.		835.0-845.0 MHz.
(1st channel is 824.040, then 824.070, etc.)		
845.0-846.5 MHz.		846.5-849.0 MHz.
(1st channel is 845.010, then 845.040, etc.)		

Base-to-Mobile (Landline to car phone)
(208 channels - 30 KHz spacing)

Radio	(Common Carriers)	Wireline
869.0-880.0 MHz.		880.0-890.0 MHz.
(1st channel is 869.040, then 869.070, etc.)		
890.0-891.5 MHz.		891.5-894.0 MHz.
(1st channel is 890.010, then 890.040, etc.)		

[We wish to acknowledge the assistance of Benn Kobb/KC5CW, Editor of Personal Communications Technology magazine and Robert Horvitz, Government Affairs Liaison, Association of North American Radio Clubs, both based in Washington, D.C., for their valuable input and assistance in obtaining the above mentioned petitions and comments.)

.....

● We have been following the radio privacy issue ever since Kastenmeier introduced HR-3378 in September of 1985. We understand that there will be another important "spectrum rights" matter introduced in January when Congress reconvenes.

Rumor has it that the Chairman of the Highway Committee is going to try and ban radar detectors nationwide. Radar manufacturers are already planning a very visible campaign in opposition to that. More later!

.....

SELECTION A HAM CALL OF YOUR CHOICE

This past week I asked Ray Kowalski, Chief of the FCC's Special Service Division, Washington, D.C., what was the status of amateurs being able to select a call sign of their choice.

"We are still positive of the concept," he said, "and hope that around the first of the year we will be able to have something on it 'out on the street' ...with an outline of a proposal and a request for the amateur community at large to comment."

"Right now our working model is that this would be along the lines of PRB-3 - although that has not been finalized yet. We want to issue some sort of public comment document saying 'Here is what we are thinking of doing, and what does the general amateur population think about it?'"

"The first thing we will ask is the threshold question. Is it a good idea to have a special amateur call sign system administered in the private sector ...and if it is, what is a good way of doing it. Here is what we have come up with ...which would along the lines of a request for formal submissions from organizations which might be interested in performing such a function."

"The next question, how many such organizations can exist at once given the high degree of coordination that would be necessary. I think I said at the ARRL National Convention in San Diego that it would take a Cray II computer to keep track of it. We are not going to prejudge that question. We want to hear from people. We think that sometime this winter will be going out with an inquiry along those lines."

● Ray also said that the new Novice question pool would not be put into effect - instead the current one will be used until the Petitions for Reconsideration are disposed of concerning turning maintenance of the various amateur examination question pools over to the various VEC's. This could be after the first of the year.

● The maximum "Expense Reimbursement" (amateur test fee) figure for 1987 has not yet been determined. Best guess is \$4.35 based on a 1.3% increase in the Consumer Price Index. The 1986 maximum test fee figure is \$4.29, but most VEC's are currently using \$4.25 since it is a more workable figure.

● Ray said that the petition seeking

spectrum from the 220 MHz ham band for the "Radio Reading Service for the Blind" is not a Private Radio Bureau matter. Instead it is being considered in the Office of Science and Technology. He said that the matter would eventually have to be coordinated with his office since it involves amateur spectrum.

● Novice Enhancement continues on schedule, but it is not to be routinely assumed that it will be enacted. "It is a very controversial matter," Ray said. "There is nothing assured about Novices 'having a Christmas present'" (as the ARRL has contended.) It could be the first of the year before the matter reaches the Commissioners for a decision.

AMATEUR GROWTH RATE - 1979 VS. 1986

Jack Althouse, K6NY, of Palomar Engineers (Escondido, California) commenting on our "Health of the Hobby" report in our last issue says that while the Amateur Service in the United States may not be growing fast, this is not true of many countries in the world. He submits the following:

"Recently I compared worldwide license totals as shown in my 1979 and 1986 callbooks. The results are interesting..."

Country:	Percent Growth 1979-1986:
U.S.S.R.	7%
United States	17%
Argentina	23%
Cuba	36%
Japan	50%
Germany	70%
Australia	90%
Venezuela	148%
England	204%
Mexico	213%
Netherlands	306%
Spain	441%

"Perhaps we should look to other countries for a solution to the growth problem."

WAYNE GREEN'S LETTER TO INDUSTRY....

73 magazine's, Wayne Green/W2NSD dashed off an 8-page letter to members of the "unofficial" ham industry group which met in San Diego at the ARRL National Convention.

November 15, 1986

He makes the following points about amateur radio growth..

(1.) Industry thinking seems to be that by keeping the group "ad hoc" (i.e. without "officers, by-laws and so on") it would be more a "difficult target to shoot down - presumably by the League."

(2.) The absence of Larry Price and/or Dave Sumner (ARRL president and Executive Vice President) from the meeting is "taken as proof positive" that the League has no intention of cooperating with industry. "Some seemed to feel that their absence was an arrogance - the ARRL way of letting the industry know they were not of enough importance to bother coming."

(3.) Some expressed fear that "the League would, one way or another, actively crush their group so as to continue to be the ONLY representatives of amateur radio..."

(4.) "The major problem amateur radio faces today is one of extinction." Wayne says that FCC figures clearly show that "Our loss of newcomers is accelerating - spiralling downwards!"

(5.) "I know about all the things there are to attract youngsters today - who do you think helped make computers into the major hobby it is?"

(6.) "I'm encouraged by the Archie comic book and anxious to see it. ...The industry, not being organized and having little money with which to work, won't be able to do much. It did get the comic book made, but it is depending on the League to distribute it and to follow up on any responses gotten from it with an Archie Newsletter, which I understand the League directors have refused to fund."

(7.) Wayne worries that all that will be done will be to send QST subscription information to push the kids to join the League and get QST. "I can't see where that's going to help a bit. There isn't much in QST to inspire kids."

(8.) "I don't think we're going to get a lot

of youngsters coming into amateur radio until we manage to rebuild the thousands of school radio clubs we had in the 50's."

(9.) "The fact is that being a Novice isn't a lot of fun. The proposed Novice Enhancement, due out the first quarter of 1987, may help... Even if we were to get a no-code license, we'd still have to go out and do a lot of work to make it a success."

(10.) "...how about a 5% increase in all ham prices with the money going to a non-profit industry organization to use to promote the hobby?"

...

THE CHRISTMAS PC MARKETING OUTLOOK!

Some \$500 million will be spent by consumers in the final three months of this year for personal computers. Some quarter of a million PC's will end up under the Christmas tree. What will it be?

September saw the introduction of a new, redesigned Apple II computer, but it doesn't look like the new 32-bit Apple IIGS microcomputer will be the "big gun" in Christmas PC sales this year. Supply is short and Apple can't make them fast enough! It is on allocation through the balance of the year. Apple does plan to sell the IIC and IIE in big numbers, however, via free discount gift certificates. The Apple IIGS's 65C02 chip can also emulate the IIC and IIE's 6502.

There are a lot of rumors to the effect that "Big Blue" will discontinue its IBM-PC "soon." They aren't talking, but due to the availability of better/faster/cheaper clones, IBM-PC sales have nose-dived from 1984's 1.5 million to this year's 500,000 units. IBM-PC price with 2 disk drives/256K memory is now \$1495 - not a profitable level for them at all!

We also hear tell of a plan by IBM to channel new products through dealers that do not carry clones and to reward these stores with deep "loyalty" discounts on existing products so that they can compete with the compatibles. IBM is placing emphasis on its Intel 80286 based PC-XT (\$3,995) and PC-AT (\$5,295) and is secretly testing a new Intel 80386 based micro in Great Britain.

Compaq already has their 80386 out on the street - the first to do so. The business oriented Deskpro 386 is in very tight supply. The 16 MHz clock speed makes it the fastest on the market. (1.2 M-byte floppy, 40-Meg hard disk, \$6,499) It also marks the first time that a clone maker has beat IBM to the marketing punch with a new generation machine.

No doubt about it, IBM clones (at \$1,000 and less) sold by mass merchandisers will be the clear Christmas winner. Sears carries Franklin Computer's Asian IBM clone and other biggies (like Caldor, Target, Best Products and the Federated Group and possibly Gemco, Walmart and Toys-R-Us) are going with an IBM clone made by Korea's giant \$10-billion conglomerate Hyundai, Ltd. - better known for its automobiles.

Hyundai launched a nationwide rollout of its low-cost Blue Chip PC priced at \$699 two weeks ago! It carries an unheard of money-back guarantee if it fails to run all IBM PC/XT software and has a one-year parts and labor warranty. (16 bit unit, 512K RAM, one floppy.)

"Leading Edge" Model D IBM clones (\$1,295) will be another big seller! (8088 Chip, 512K RAM, two 360K floppies) Korea's Dae-woo has a \$400 million deal to supply these to Leading Edge Hardware Products of Canton, Massachusetts. K-Mart a previous big mover of (particularly Commodore) PC's will not be selling any computers at all this year!

Tandy's (Radio Shack) Christmas Special is a \$799 version of the basic IBM-PC. Included is a \$300 color monitor at no extra cost! Introduced in July, the 1000-EX IBM work-alike will include one disk drive, 256K RAM, three expansion slots and bundled software. Initially plagued by RFI problems, Tandy only got FCC marketing approval on the 1000 a month ago. Tandy has remodeled 400 of its Radio Shack stores as the beginning of a four-year \$80 million face lift.

Commodore is pushing the Amiga with a \$500 price cut and dealer deferred payment until the computers are sold! A revamped Commodore 6C4 will sell for as low as \$150 - and is an excellent value. Consider it!

While inexpensive IBM clones are selling the best "collectively" in the retail PC market, Apple's MacIntosh is the biggest individual seller in terms of units and dollars sold. The Motorola 68000 CPU-based basic "Mac" is \$1,699, while the MacIntosh Plus - \$2,199. At least one research firm says that the Apple IIe and IIC are the No. 2 and 3 individual sellers. Much 6502 software is available for them.

Atari Corp, maker of the 520-ST and 1040-ST, is "going public" and will offer 4.5 million shares of stock to raise some \$60 million. They need to money to pay off indebtedness.

UPDATE ON VIDEO HOME SHOPPING....

More new cable-TV home shopping plans on the way! Tempo Galleria will feature specialty shops. Segments of a three hour format will focus on women's and men's apparel, household products, jewelry and seasonal goods such as "The Christmas Store." Another new entry, ChannelAmerica, will be a joint venture with retailer and jewelry maker, Best Products. Lorimar-Telepictures is planning a shopping service called ValueTelevision.

Even public station WNYC-TV plans a late night service called The Shopping Line. The venture will be a new twist for public television in their never ending search for funding. The station has a merchandise arrangement with Columbus (Ohio) based Consolidated Stores and hopes to earn \$2,000 per hour! The station will get 10% of gross sales.

ESPN is already considering a move into the home shopping field and Financial News Network just expanded its home shopping service.

Cable video shopping is also coming to broadcast TV. The FCC has already approved transfer of the nine UHF-TV broadcast stations bought by HSN, the Home Shopping Network, of Clearwater, Florida. TV program syndicators are arguing, however, that tele-shopping is not an appropriate use of the broadcast spectrum. HSN is selling "several hundreds of millions of dollars" in stock to finance its station acquisitions and they have

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received many inquiries from other TV broadcasters about carrying their shopping service. Advantage of broadcast over cable shopping is that HSN doesn't have to pay commissions when they own the outlet! HSN's cable subscriber base is already over 15 million!

Video home purchasing by credit card is potentially so big that it is mind-boggling! Apparently bad credit is not a problem to the home shopping firms since they clear all credit card purchases before shipment. It does pose a problem to the credit card companies, however, since some shopping addicts go over their limit before the firms can curtail their spending. There are currently 830 million credit cards in circulation with a total purchasing power of \$2.75 trillion - equal to 2½ times of all of the U.S. currency in circulation now!

Newest cable wrinkle is satellite distributed Video Bingo, an after hours effort by The Nashville Network. A computer can generate billions of different playing cards and store information about the cards it has made available. Once a person has filled in all spots on his card, the computer flashes on the screen that there is a winner and has 10 minutes to claim his prize which range from \$500 to \$10,000.

SIRA HAMS ASSIST IN SAN SALVADOR

The Mayor and City Council of Hialeah, Florida, have honored Raphael Estevez, WA4ZZG, and members of SIRA, (International Society of Amateur Radio) with Resolution 86-114 commending them for their fine public service work during the recent earth quake in San Salvador. Raphael and several other SIRA members went to San Salvador for five days during mid-October to assist with handling health and welfare traffic to and from the U.S.

The SIRA team took with them more than 400 pounds of food, medicine, blankets and supplies for the victims. The Salvadoran government allowed them to use YS1SIRA on the 20 meter HAM band.

The group was divided in half. One team handled incoming messages, the other,

outgoing. Still others were in another room on the telephones relaying the traffic to destinations. Thanks to YS1WM, YS1RN and YS1EG, the SIRA team handled more than 3,500 messages during their five day stay in San Salvador. Many South American countries were serviced by the YS1SIRA amateur radio station.

It wasn't the first time that SIRA has operated from a foreign country during time of disaster. In 1972, YN1SIRA was active when Nicaragua was struck by a series of tremors that killed 10,000. In 1974, HR0SIRA, was on-the-air after Hurricane FiFi in Honduras. TG9SIRA provided communications from Guatemala's capital when it was levelled by a earthquake that killed 25,000. SIRA handled more than 10,000 messages during the Mexico City earthquake.

● The ACSB (amplitude compandered side-band) repeater being built by the Alabama Repeater Council's Bernie Nissan, W4ZBA, is in working condition on the bench and may be installed soon.

● Lenore Jensen, W6NAZ, is compiling a book. Ham Tales is a collection of adventures with or because of Amateur Radio aimed at the non-ham reader. Profits go to the ARRL foundation. Welcomed are "rescues, coincidences and amusing anecdotes, but nothing technical nor requiring an understanding of ham radio." Send to: 14867 Round Valley Drive, Sherman Oaks, CA 91403.

● The FCC has a new system of releasing Rule Making (Report and Orders, NPRM's, Notices of Inquiry - and the like) to the public and it does not seem to be working well at all! As we understand it, releases are now made through the Department of Commerce. We still don't have the Order yet on "Credit for Written Amateur Radio Operator Examinations" which takes effect on December 1st.

● New §Part 97.80(b) rule (effective November 24) concerning "Operation Under Automatic Control" now reads:

"No amateur station may be operated under automatic control while transmitting third-party traffic, except an amateur station retransmitting digital packet radio communications on frequencies 50 MHz and above.

Such stations must be using the ARRL AX.25 Amateur Packet-Radio Link-Layer Protocol, Version 2.0, October 1984, or compatible. The retransmitted messages must originate at an amateur station which is under local or remote control."

● CompuServe Information Service has clarified their copyright policy. They apparently have no objection if you upload public domain files and republish them on your non-commercial bulletin board, RTTY, or packet network providing you indicate the file was via CompuServe. They are primarily concerned about whole libraries being republished and subscribers charged for reading them. If you want to upload many files, request permission through the services "Feedback" electronic mail facility.

● CIA Director William J. Casey says he wants tougher laws to punish both government employees who leak secrets and news media that willfully publish them.

● The ARRL's new updated "FCC Rule Book" is now available. Up-to-date to October 1, 1986, the book is a must for every amateur's bookshelf. Available from: W5YI, P.O. Box #10101, Dallas, TX 75207. Cost: \$4.00 plus \$1.50 postage.

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FCC SERIOUS ABOUT SELLING SPECTRUM!

Comparing the valuable radio spectrum to land, FCC Chairman Mark Fowler asked for an end to the "free ride." Fowler asked Congress last month for the authority to auction off the spectrum, just as the Department of the Interior auctions mineral leases.

He wants to see an auction, not only for the revenue it would add to the Treasury, but also because he thinks it would be a better way of determining who receives an FCC license.

At present the FCC uses two methods to award frequencies such as to broadcast and cellular applicants. The FCC reviews all applicants and determines who would best

serve the public interest in the "comparative" process. The other method is by "lottery".

Neither system reduces the federal deficit or provides a source of funding for Public Broadcasting. "...the funds could even be used for acquisition of state-of-the-art mobile communications systems for a new national public safety network."

The situation has really gotten out of hand, however, in the case of determining cellular phone licensees. Thousands of applicants have applied for the relatively few markets available - several are investors with no intention of ever building a telecommunications system.

Many of the ones that "win" a free license end up reselling the license to the highest bidder. For example, John Kluge, of Metromedia, Inc., wants to sell the cellular phone licenses he was given free by the FCC four years ago to Southwestern Bell of St. Louis for \$1.2 billion.

FCC Commissioner Dennis Patrick said "If spectrum is going to be auctioned off anyway, the proceeds should go to the people who really own it." Fowler thinks that at least \$2 billion could be raised by selling the remaining land mobile reserve frequency band.

While no one expects emergency and public safety ...or even broadcasters to pay for licenses, the FCC feels that private telecommunications providers are taking advantage of the system and the taxpayer.

NABER, the National Association of Business and Educational Radio opposes spectrum auctions. Congress is also concerned that well financed speculators will purchase and "warehouse" spectrum and later turn it over at a profit at the expense of the small businessman.

ILLEGAL CB'S WORTH \$65,000 DESTROYED

Last March the FCC's Field Operation Bureau announced that it would be stepping up its efforts to combat the illegal sale and use of linear amplifiers used to boost Citizens Band transmitter power. A study involving

interference to home electronic entertainment equipment had determined that 57% of those cases could be attributed to overpowered CB stations - 91% of those involved linear amplifiers.

On October 23, 1986, personnel from the FCC's San Francisco office destroyed an estimated \$65,000 worth of illegal radio equipment including radio frequency amplifiers and modified CB transceivers at the Sanitary Fill Company, 501 Tunnel Avenue, San Francisco, California.

The equipment was seized through executed warrants against several Northern California CB sales outlets as well as surrendered by individual CB operators, in lieu of prosecution. The radios operated on frequencies outside the CB Radio Service with unauthorized emissions and illegal transmitter power and were capable of causing harmful interference to public safety and emergency radio services as well to home electronic equipment.

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NEW PC NETWORKING PLAN PROPOSAL

The October 27th issue of "Info World", a microcomputer industry weekly, has an article in it entitled "FCC Decides Against PC Radio Networking Plan." It carries a subtitle of "Agency Encourages Reapplication for Different Bandwidth."

The author, one Laurie Flynn, interviewed both the FCC's Deputy Special Services Chief, Roger Madden, and Donald Stoner, W6TNS, Mercer Island, Washington, about the concept. (See W5YI Report, October 15, page 4)

Stoner's original proposal was to reallocate two MHz of the 6 meter ham band to an unlicensed public personal computer interconnection service. His idea for a Public Digital Radio Service (PDRS) involved the use of a wideband packet radio circuit to link the nation's microcomputer users.

In denying the Stoner petition, the FCC said that use of the six meter ham band by non-amateurs was not possible since the band was exclusively ITU allocated to the licensed Amateur Radio Service. The FCC suggested,

however, that perhaps the 902 to 928 MHz band could be considered since it is a shared band. In ITU Region 2, this band is also designated for Industrial, Scientific and Medical (ISM) applications.

The Info World article said that Stoner planned to "submit a petition for that bandwidth within the next few weeks." The FCC was quoted as calling the computer network "a legitimate use" of radio frequencies but "there was no guarantee a new petition would be approved." I asked Ray Kowalski about this last week and he said that his office had indeed talked to Info World, but that he was unaware of any new petition forthcoming.

I telephoned Don Stoner and he said that he was indeed in the process of looking into filing a new petition that would allow unlicensed personal computerists to be radio linked in the 902-928 MHz frequency band.

"There is a lot of work that must be done," Stoner said. "The problem is that when you go up into those high frequencies the concept that I proposed for 50 MHz does not work as well. The reason is that you get spreading errors - a fancy name for 'ghosts' like you get on your TV set. The signals bounce off of everything at those frequencies. Unless you have directional antennas, you are going to get 'ghost' pulses and wanted signals that are cancelled out."

"It is going to have to be a system almost like cellular in which you have many narrower channels and one calling channel. The concept of one wide channel will work at 900 MHz, but the baud rates that you could expect without error are much less than the bandwidth would permit. The system will have to be many individual channels. I am in the process of looking into it."

Stoner also is looking into exactly where he should propose the new computer-to-computer radio service. He notes that the ARRL band plan adopted by their Board of Directors in October of 1984 suggests that 922 to 928 MHz be designated for "wide bandwidth experimental." A Public Digital Radio Service located there would not interfere with other 900-MHz amateur communications.